

REMARKS

Reexamination and reconsideration of claims 1-56 are respectfully requested. Claims 57-89 are withdrawn from consideration. Additionally, the Examiner's consideration of the Information Disclosure Statements is acknowledged with appreciation.

The drawings were objected to because reference number "16" on the upper left side of Figure 1 should be --26--. Attached hereto is a proposed correction to Fig. 1. Withdrawal of the objection to the drawings is respectfully requested.

The Office Action objected to the disclosure. Applicant amended the passage that was objected to in the Office Action. Withdrawal of the objection to the specification is respectfully requested.

Claims 1, 4-22, 25-41 and 44-56 were rejected under 35 U.S.C. sec. 103(a) applying U.S. Pat. No. 5,268,971 ('971) in view of U.S. Pat. No. 6,482,512 ('512). For patents to be applicable under sec. 103(a), the combination of teachings must, *inter alia*, expressly or inherently, teach, disclose, or suggest each and every feature of the claimed invention. Additionally, motivation and suggestion to combine the patents must be present.

It is respectfully submitted that at least each and every feature of amended claim 1 is not disclosed, taught, or otherwise suggested either explicitly, or inherently, by the purported modification. Additionally, the amendment of claim 1 and its dependent claims is not an admission that the art of record discloses, teaches, or otherwise suggests the features of claim 1.

Specifically, claim 1 recites, *inter alia*, that the at least one non-jacketed bundle of optical fibers comprises a plurality of optical fibers and at least one preshrunk binder thread encircling the plurality of optical fibers to thereby maintain the plurality of optical fibers in the bundle, the at least one

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preshrunk binder thread comprising an air entangled, textured, continuous multi-filament thread having no more than 25 twists per inch. It is respectfully submitted that the rejection of record does not teach, disclose, or otherwise suggest each and every feature of claim 1.

By using a preshrunk, air entangled, textured, continuous multi-filament binder thread having no more than 25 twists per inch the non-jacketed bundle has improved optical performance. For instance, since the binder thread is preshrunk it is less likely to shrink or have a smaller percentage of shrinkage during temperature changes, thereby inhibiting forces that may cause optical attenuation. On the other hand, a binder thread that is not preshrunk will generally shrink more with temperature changes, thereby causing forces that may increase optical attenuation. Thus, the merits of the present invention improve optical performance. For at least this reason, the withdrawal of the sec. 103(a) rejection of claims 1 and 4-20 is warranted and respectfully requested.

Regarding claim 21, it recites, *inter alia*, at least one binder thread encircling the plurality of optical fibers thereby maintaining the plurality of optical fibers in the bundle, the at least one binder thread having a silicone wax emulsion finish. None of the references of record disclose, teach, or otherwise suggest this feature of claim 21. For at least this reason, the rejection of claims 21-40 is traversed.

Instead, the Office Action states that "Schwartz discloses a thread comprising an air entangled, textured, continuous multi-filament thread. However, Schwartz does not disclose the number of twists per inch in the thread. Furthermore, claims 4-22, 25-41 and 44-56 recite other types of materials for the binder thread. Since the number of twists per inch in the thread is also a type of material and the instant invention does not provide any reason or a specific problem to be solved by having

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the materials recited in claims 1, 4-22, 25-41 and 44-56, it only deals with the use of a preferred material because the function of the binder thread, binding the plurality of optical fibers, does not change or affected by the use of the materials recited in claims 1, 4-22, 25-41 and 44-56." See p. 3 of the Office Action dated November 17, 2003. The assertion that features of the instant invention do not affect the manufacture and/or optical performance of the cable is incorrect.

In this case, the at least one binder thread having a silicone wax emulsion finish as recited in claim 21 aids in the manufacture of the bundle of optical fibers. Specifically, the silicone wax emulsion finish allows faster line speeds with less down time because the finish allows the binder thread to easily slide through the eyelets of the stitching needles and relative to another binder thread. Thus, claim 21 is novel over the references of record and provides an important contribution to the art. For at least these reasons, the withdrawal of the sec. 103(a) rejection of claims 21-40 is warranted and respectfully requested.

Regarding the sec. 103(a) rejection of claims 41-56, the sec. 103(a) rejection is respectfully traversed since the purported combination fails to disclose, teach, or otherwise suggest each and every feature of claim 41. Specifically, claim 41 recites, *inter alia*, at least one bundle of optical fibers comprising a plurality of optical fibers and at least one binder thread encircling the plurality of optical fibers with a pitch between 10 mm and 70 mm to thereby maintain the plurality of optical fibers in the bundle, the at least one binder thread comprising an air entangled, textured, continuous multi-filament thread having no more than 25 twists per inch, a TEX number between 18 and 60 and a denier between 150 and 1000, the at least one binder thread also including a finish that is inert with respect to those components of the fiber optic cable with which

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the at least one binder thread comes into contact. Simply stated, the purported combination does not teach, disclose, or otherwise suggest each and every feature of claim 41. Thus, the Office Action failed to make a *prima facie* case with respect to claims 41-56. For at least this reason, the withdrawal of the sec. 103(a) rejection of claims 41 and 44-56 is warranted and respectfully requested.

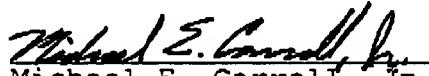
Claims 2, 3, 23, 24, 42 and 43 were rejected under 35 U.S.C. sec. 103(a) applying the '971 and '512 patents in further view of U.S. Pat. No. 5,165,003 ('003). For at least the reasons stated above, the purported modification fails to teach, disclose, or otherwise suggest each and every feature of claims 1, 21, and 41. For at least these reasons, the withdrawal of the sec. 103(a) rejection of claims 2, 3, 23, 24, 42 and 43 is warranted and respectfully requested.

No fees are believed due in connection with this Reply. If any fees are due in connection with this Reply, please charge any fees, or credit any overpayment, to Deposit Account Number 19-2167.

Allowance of all pending claims is believed to be warranted and is respectfully requested.

The Examiner is welcomed to telephone the undersigned to discuss the merits of this patent application.

Respectfully submitted,

  
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